

REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 1-4 were pending. By the present response, claim 5 has been added. Thus, upon entry of the present response, claims 1-5 are pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: paragraphs [0007], [0016], [0017]; and the original claims.

Entry of the foregoing is appropriate pursuant to 37 C.F.R. §1.116 for at least the following reasons. First, the amendments raise no new issues that would necessitate further search and/or substantive reexamination. Second, the amendments clearly overcome the grounds of rejection.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claims 1-4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,450,692 to Toyota (hereafter "*Toyota*") in view of JP 6-306383 to Horano et al. (hereafter "*JP '383*") on the grounds set forth on page 2 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present invention is directed to fire safe bearings. Bearings utilized in certain installation must meet various government standards for performance. One such performance standard is the new European standard EN12101-3, which

specifies that electric motors to be used in ventilators should be capable of functioning in high temperature environments for a certain period of time. In addition to meeting such performance standards, these bearings should also be capable of efficient operation under everyday conditions.

At least one type of certified bearing construction is composed of carbon chromium steel which is subjected to a suitable heat treatment to render it more stable under high temperature conditions. These bearings utilize high temperature greases or pastes based on silicon or PTFE thickeners, and base oils. However, such bearings do not fulfill the requirements of more stringent high temperature standards, such as the European standard mentioned above. The combination constructed according to the principles of the present invention as set forth in claim

1. Claim 1 recites:

1. A bearing and lubricant combination for use as a supporting system for a rotating shaft in a smoke and heat exhaust ventilation system and having properties permitting it to fulfill the requirement to withstand an emergency temperature of 600°C for at least 60 minutes with a stand-still of 2 minutes after 15 minutes exposure to the emergency temperature comprising a bearing comprising martensitic stainless steel bearing rings with a steel cage, which bearing is lubricated with an electric motor grease with a base oil viscosity in the region of 50-200 cSt at 40°C.

A combination constructed according to a further aspect of the present invention is set forth in newly presented claim 5. Claim 5 recites:

*5. A bearing and lubricant combination comprising:
the bearing comprising martensitic stainless steel bearing rings and a steel cage;
the lubricant having a base oil viscosity of 50-200 cST at 40°C;
wherein the combination comprises properties which permit it to withstand an emergency temperature of*

600°C for at least 60 minutes with a stand-still of 2 minutes after 15 minutes exposure to the emergency temperature.

Toyota and *JP '383*, taken alone or in combination, fail to disclose, or even suggest, the subject matter of the presently claimed invention.

Toyota discloses various bearing arrangements in which certain components can be constructed from martensitic stainless steel. However, as acknowledged on page 2 of the Official Action, *Toyota* fails to disclose a lubricant of the type recited in claims 1 and 5 above.

JP '383 is cited as allegedly teaching the use of a bearing grease having a base oil or synthetic ester further comprising a soap of polyurea having a base oil viscosity of 10-245 cSt at 40°C. However, even if the teachings of *JP '383* were applied in the manner suggested, the claimed invention would not result.

As evident from the above, claim 1 requires, *inter alia*, "a bearing and lubricant combination . . . having properties permitting it to fulfill the requirement to withstand an emergency temperature of 600°C for at least 60 minutes with a stand still of 2 minutes after 15 minutes exposure."

Similarly, claim 5 requires, *inter alia*, "wherein the combination comprises properties which permit it to withstand an emergency temperature of 600°C for at least 60 minutes with a stand still of 2 minutes after 15 minutes exposure to the emergency temperature."

Neither *Toyota*, nor *JP '383*, taken alone or in combination, disclose, or even suggest, at least this aspect of claims 1 and 5.

With respect to claim 1, it is asserted on page 3 of the Official Action that the above quoted recitation "has not been given patentable weight because the

recitation occurs in the preamble." Applicant respectfully traverses this interpretation of claim 1. Contrary to the assertions contained on page 3 of the Official Action, the above quoted recitation of claim 1 is not directed to a purpose, process, or intended use of a structure. To the contrary, the above quoted recitation in claim 1 is reciting the fact that the bearing and lubricant combination of the present invention have properties that allow it to meet certain minimum performance requirements. Thus, when properly interpreted, the bearing and lubricant combination of claim 1 is directed to a combination which is constructed in a manner which meets the performance requirements explicitly set forth in claim 1. Applicant respectfully submits that it is improper to disregard this aspect of the presently claimed invention as has clearly been done as set forth on pages 2-3 of the Official Action. Reconsideration and withdrawal of the rejection of claim 1 is thus respectfully requested.

It is further asserted on page 3 of the Official Action that: "the rejection discloses all of the positively claimed bearing structure of the device. It therefore must also anticipate the intended function of the device disclosed in the preamble." This assertion is respectfully traversed.

Again, the above quoted statement indicates that the above-identified portion of claim 1 has been properly disregarded in the claim construction analysis. The above quoted statement implies that the performance requirement set forth in amended claim 1 are not considered to be "positively claimed bearing structure." This assertion is respectfully traversed. In particular, Applicants note that claim 1 requires a bearing and lubricant combination "having properties permitting it to fulfill the requirements to withstand an emergency temperature of 600°C. . ." (Emphasis

added). Neither *Toyota* nor *JP '383* disclose, or even suggest, a bearing lubricant combination having such properties.

Although not clear from the statement contained on page 3 of the Official Action, to the extent that it is implied that the bearing and lubricant combination of *Toyota* and *JP '383* inherently satisfies the performance requirement set forth in claim 1, this assertion is respectfully traversed.

The fact that a certain result or characteristic may occur, or may result from a given set of circumstances, is not sufficient to establish inherency of a claimed element that is not expressly disclosed in the prior art. In re Rijckaert, 9F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993); In re Robertson, 169F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999). The grounds for rejection clearly fail to establish how the bearing and lubricant combination of *Toyota* and *JP '383* inherently satisfy the performance requirements set forth in claim 1. Thus, the grounds for rejection are deficient in at least this additional regard. Reconsideration and withdrawal of the rejection is respectfully requested.

As noted above, newly presented claim 5 contains a similar recitation with respect to the properties of the bearing and lubricant such that it satisfies certain minimum performance requirements. Thus, claim 5 is distinguishable over the proposed combination of *Toyota* and *JP '383* for at least the same reasons noted above.

Likewise, claims 2-4 depend from claim 1. Thus, these claims are also distinguishable over *Toyota* in view of *JP '383* for at least the same reasons previously noted herein. In addition, Applicants notes that claim 2 requires that the grease comprises a soap of polyurea. Contrary to the assertions contained in the

Official Action, Applicant does not read *JP '383* as teaching providing the lubricant with a soap of polyurea as required by claim 2. Thus, claim 2 is distinguishable over the proposed combination for at least this additional reason.

CONCLUSION

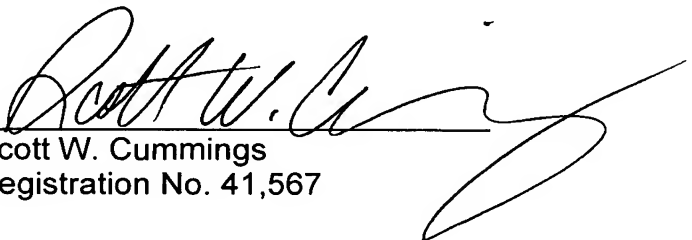
From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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